

Amendments to the Claims

Please cancel Claims 13-24. The Claim Listing below will replace all prior versions of the claims in the application:

Claim Listing

1. (Previously presented) A method for circuit emulation over a multi-packet label switching (MPLS) network, comprising:
 - receiving a time division multiplexed data stream at an ingress end from an optical carrier;
 - dividing the data stream into a set of fixed sized packets;
 - adding a service header to each of the packets;
 - adding an additional header on top of the service header in accordance with MPLS protocols;
 - removing the additional header after each packet has been processed by the MPLS network;
 - using the service header to recover the data stream at an egress end;
 - storing a first set of frames of the data stream into a data buffer during times clocks of the ingress and egress ends cannot be traced to a common reference source;
 - calculating a first data average of the first set of frames in the data buffer to obtain a threshold value;
 - storing a next set of frames into the data buffer;
 - calculating a next data average of the next set of frames in the data buffer;
 - comparing the next data average to the threshold value; and
 - if the next data average is greater than the threshold value, generating a negative justification indicator and sending one more byte at the egress end, or if the next data average is less than the threshold value, generating a positive justification indicator and sending one less byte at the egress end.
2. (Previously presented) The method of claim 1, further comprising:
 - monitoring the data stream; and

attaching an alarm bit in a service header of a subsequent packet if a break in the data stream is detected.

3. (Previously presented) The method of claim 1, further comprising:
 - using a negative justification bit and a positive justification bit in the service header to indicate whether the synchronous payload envelope includes a negative stuff byte or a positive stuff byte.
4. (Previously presented) The method of claim 6 wherein the structure pointer reserves a pointer value indicating that the header byte is not present within the packet.
5. (Previously presented) The method of claim 1, further comprising:
 - recording a stuffing time difference in a service header at the ingress end; and
 - implementing the stuffing time difference at egress end.
6. (Previously presented) The method of claim 1, wherein the service header includes a structure pointer to indicate whether a header byte indicating a start of a synchronous payload envelope is present within a packet, the structure pointer indicating a location of the header byte in the packet.
7. (Previously presented) The method of claim 1, further comprising:
 - checking a sequence counter in the service header of each packet in the set of packets;
 - locating at least one header byte in the set of packets;
 - measuring all bytes between two header bytes; and
 - pushing the set of packets into a frame.
8. (Previously presented) The method of claim 1, further comprising:
 - checking a sequence counter in the service header of each packet in the set of packets to determine if all packets are present sequentially; and

inserting a dummy packet if a packet is missing in the set of packets.

9. (Previously presented) The method of claim 8, further comprising:
 - receiving an out of sequence packet; and
 - discarding the out of sequence packet.
10. (Previously presented) The method of claim 1, further comprising:
 - checking a sequence counter in the service header of each packet in the set of packets to determine if all packets are present sequentially;
 - terminating a current connection if multiple packets are missing in the set of packets;
 - discarding the set of packets; and
 - establishing a new connection to begin receiving packets.
11. (Previously presented) The method of claim 1, further comprising:
 - checking a sequence counter in the service header of each packet in the set of packets to determine if all packets are present sequentially; and
 - establishing an in-frame condition after the set of packets are received in sequence.
12. (Previously presented) The method of claim 11, further comprising:
 - determining whether the in-frame condition is valid; and
 - terminating a current connection if the in-frame condition is not valid.
13. – 24. (Cancelled)